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Spennymoor Urban District Council.

MEDICAL OFFICER'S REPORT, 1906.





GENTLEMEN,

I beg to submit to you my Report for the Year, 1906.

THE DISTRICT.—The area comprises 3388 acres, and is partly urban and partly rural in character. It is bounded on the *north* by the River Wear, on the *south* by the Railway from Merrington Lane to Binchester Colliery, on the *east* by the Darlington Road, and on the *west* by the Highway from the River Wear to Binchester Railway.

INDUSTRIES.—The chief is Coal Mining. The Tudhoe Ironworks have a blast furnace in operation and will shortly have another. They are also building a new set of coke ovens. There are foundries at Merrington Lane and Tudhoe Grange, brickworks at Tudhoe Colliery and Merrington Lane, and a sawmill at Tudhoe.

POPULATION.—According to the Census of 1901, the population was 16,661. The number of inhabited houses 3204, and the average number of inmates 5. The number of dwelling houses erected since then is 109, and the population to the middle of 1906 is estimated at 16,814. I am of opinion that this estimate is below the actual numbers.

BIRTHS.

There were 635 births registered during 1906, an increase of 14 on 1905, this gives a birth rate of 37·7 per 1000. For comparison I give the following figures:—1905, 37; 1906, 37·7; 10 years average 38·3; County average 35·2. You will thus see in your district there has not been the serious diminution of births that has been called attention to in many parts of the Country.

DEATHS.

There were 291 deaths registered as occurring in the district to these have to be added 16 deaths of residents in the district who died in public institutions outside the district, giving a total of 307 and a death rate of 18·2 per 1000. This is a decrease of 28 on the year 1905 and a reduction of 2·9 on the death rate. As in 1905 the larger number of deaths occurred from Diarrhoea, viz :—48 (an increase of 10 on 1905), Bronchitis and Pneumonia 34 and Phthisis 22 (an increase of 13 on 1905.)

Diarrhoea was again epidemic in August, September and October, the deaths with few exceptions occurring in young children.

Bronchitis and Pneumonia.—There were 34 deaths from these diseases, a decrease of 30 from 1905 when there were 64; this no doubt is largely due to the relative mildness of the months October, November, and December, in 1906.

Phthisis.—There were 22 deaths from Phthisis in 1906 as opposed to 9 in 1905, a very marked increase which I cannot account for. An exceptional thing about these deaths is that 13 (or more than half) occurred in persons above 35 years of age.

As in former years the death rate in Tudhoe Ward, 15·6, is less than that in Spennymoor Ward 20·6, and Ferryhill Ward 20·3. This no doubt is largely due to the more crowded condition with the smaller proportion of air space in the latter two wards.

UNCERTIFIED DEATHS.

The number of uncertified deaths was 49, of which 16 occurred in children under 1 year of age. This corresponds to 16·8% of the total death rate and about 16% of the infant mortality. The large majority of these deaths occurred in the practice of Mr Thompson.

INFANTILE MORTALITY.

The deaths of infants under 1 year of age numbered 99, giving an infant mortality rate of 155 per 1000 registered births, of these 31 or nearly 33% were due to diarrhoeal diseases and 15 to premature birth. I would specially call your attention to this large number of deaths from diarrhoea which are mostly preventable, as I think this is the key to our present and continued high death rate. I am convinced that there will be no great diminution in the general death rate until this question of infant mortality is dealt with in an energetic manner. There is no question that greater care in the feeding and management of young babies would prevent the great majority of these deaths from diarrhoea. Other contributory factors are carelessness in the handling and storage of milk and very probably the contamination of the water in the Spennymoor Reservoir. There is some cause for congratulation in the fact that the infant mortality rate in 1906, viz:—155 is 70 less than that of 1905 in spite of the large mortality from Diarrhoea. It is in fact the lowest in the last 10 years excepting 1903 (when it was 131) but this was a wet cold summer. It is however in my opinion much higher than it should and could be. For information and comparison I append the following statistics :

Infantile mortality	1905	1906
Spennymoor	225	155
Durham County	159	157
England and Wales	128	133

ZYMOTIC DISEASES.

The deaths from Zymotic diseases were Whooping Cough 7, Diphtheria 2, Croup 2, Influenza 1, Enteric Fever 2, Diarrhoea 48, total 62. This gives a Zymotic death rate of 3·6 per 1000 which is the same as in 1905. This compares unfavourably with the County Zymotic death rate which is 2·4. If as is usually done the Zymotic death rate is taken as the truest test of the sanitary condition of a district Spennymoor has little to be proud of.

INQUESTS.

There were 11 inquests held during the year and the following verdicts were returned:—Accidental death 7, Suicide 2, Poisoning 1, natural causes 1. With a population including so many pitmen a large number of accidental deaths is almost inevitable.

INFECTIOUS DISEASES (NOTIFICATION) ACT.

65 cases of Infectious diseases were notified during the year viz:—Diphtheria 21, Erysipelas 11, Scarlet Fever 19, Enteric Fever 13, Puerperal Fever 1. One case of Enteric Fever appeared in the death returns which had not been notified. This is an increase of 8 cases on the returns of 1905. The number of notifications for the last 5 years are as follows:—1906, 65, 1905, 57, 1904 105, 1903, 120, 1901, 169.

With the exception of a slight rise in 1906 the number of notifications has steadily declined. This decrease may I think be very fairly attributed to your Isolation Hospital. When one finds how difficult it is to make the friends of patients realize the importance of isolating mild cases one is convinced that without an isolation hospital it would be impossible to prevent the spread of infectious diseases.

The cases were distributed as follows :—

	Diphtheria.	Scarlet F.	Erysipelas.	Enteric.	Total.
Spennymoor Ward	13	14	3	6	36
Ferryhill Ward	2	2	4	3	11
Tudhoe Ward	6	3	4	4	17
Urban District	21	19	11	13	64

It will be seen that more cases were notified in Spennymoor Ward than in the other two Wards put together.

Diphtheria.—21 cases were notified, 13 of these occurring in Spennymoor Ward. The cases were distributed throughout the year and in most cases no cause could be found. A child notified in October as suffering from Diphtheria had been allowed to attend school for a week before the notification was received. The Inspector removed him from school and the father was asked to attend before the Council and reprimanded for allowing him to go to school whilst in an infectious state. Two cases appeared shortly after in children attending this school. An epidemic of pseudo membranous throats occurred in October. Several swabs were taken and sent to Newcastle for examination but in most cases a negative result was obtained. As is often the case several cases of diphtheria followed this epidemic. I am pleased to report that the Medical Practitioners of the district are making more frequent use of the facilities afforded by the Durham County Council for the examination of suspected material as an aid to diagnosis in cases of Diphtheria, Phthisis and Enteric Fever. This not only tends to increased accuracy in diagnosis but also

tends to prevent unsuitable cases being sent to the hospital, thus saving expense to the Council.

There were 2 deaths from Diphtheria but both occurred outside the hospital.

Scarlet Fever.—19 cases were notified. School infection appeared to be the cause in 2 groups of cases, one group in the National Schools, High Street, the other in the Higher Grade School, Weardale Street. In two cases 2 members of a family were infected. In all the other cases no connection could be traced. Scarlet Fever now usually runs such a mild course that I think some cases are not recognized, and fail to come under medical observations. No deaths occurred from this disease. I am afraid that efforts to trace connection between cases of this disease often fail, owing to mild cases being unrecognised. There is little excuse for this now that the County Council furnish every facility for medical practitioners to verify their doubtful cases. It is a curious fact that all the 21 cases occurred in the practices of 3 medical men of the district and that those three were the only ones who sent swabs from suspected cases for examination. It is conceivable that 21 cases should occur in the practices of three men and none in those of the others, but it is scarcely probable. I would point out that 3 cases of Croup appeared in the death returns. In 99 cases out of a hundred fatal croup is diphtheria and yet as far as I can ascertain no specimen from either throat was taken for examination nor were the cases notified. I would urge the medical practitioners of the district to use the facilities for increased accuracy of diagnosis provided by the County Council for all suspicious cases.

Enteric Fever.—13 cases of this disease were notified which is 2 less than in 1905. Considering that Enteric Fever was epidemic in the autumn in several of the surrounding districts, it is a matter for congratulation that the cases were so few. The cause of these cases could not be ascertained. There was no connection between them as regards milk supply. They could scarcely have been due to water or we should have had more of them and they would not have been spread over so long a period. I pointed out last year that flies were often responsible for the spread of this disease. In some instances it may have been so but some occurred after the fly season. In one or two cases I ascertained the patients had partaken of shell fish shortly before their illness, but whether it was caused by this it is difficult to state with any accuracy. In most of the cases this source of infection was negatived. Two cases proved fatal, one in a patient about 48 hours after her removal to hospital, and was probably due to perforation. The other death occurred in a patient not notified.

Erysipelas.—11 cases were notified. In no case could one case be traced to another. As the infection in the disease is so

slight I see no reason for keeping it on the list of notifiable diseases.

Of the 21 cases of Diphtheria 13 were removed to the hospital and 8 isolated at home. Of the 19 cases of Scarlet Fever 17 were removed to the hospital. Of the 13 cases of Enteric Fever 12 were removed to the hospital, the other one was a very doubtful case in a child, the practitioner in charge of the case afterwards thought it was not a case of Enteric Fever, and it was not deemed advisable to remove it.

Puerperal Fever.—One case was notified. The case was visited and the Nurse in attendance warned not to attend any other case for a month. It gave rise to no other case.

ISOLATION HOSPITAL.

On January 1st, there were in hospital 1 case of Enteric and 1 of Scarlet Fever. During the year 17 cases of Scarlet Fever, 13 of Diphtheria, and 11 cases of Enteric were admitted. 15 cases of Scarlet Fever, 11 cases of Diphtheria, 9 cases of Enteric Fever were discharged cured. There were remaining in the hospital on December 31st, 3 cases of Scarlet Fever, 2 of Diphtheria and 1 of Enteric Fever. One case of Enteric Fever proved fatal. One case of Enteric Fever occurred in a Nurse engaged at the hospital. She was removed to Hartlepool early in the disease.

Scarlet Fever.—All the cases were mild and gave rise to no anxiety.

Diphtheria.—One case a laryngeal one was severe, and was in a critical condition for 2 or 3 days. The other cases were mostly of a mild type. No death occurred in the hospital from this disease.

Enteric Fever.—One case which was not notified until the third week of illness proved fatal. He was in a critical condition when seen, but on account of the surroundings it was thought advisable to remove him. In future when cases are notified so late in the disease I think it would be advisable not to remove them. Three other of the cases were severe and but for the skilled nursing which your hospital affords would I think have proved fatal. The others were mostly mild cases.

The nursing has on the whole been very satisfactorily accomplished, the nursing staff having spared no pains or trouble in the interests of the patients, and are I think to be congratulated on the result of their year's work.

PRECAUTIONARY MEASURES.

The means taken to prevent the spread of Infectious Diseases are the adoption of the Infectious Diseases (Notification) Act and the Infectious Diseases (Prevention) Act, an Isolation Hospital

equipped with disinfecting apparatus, ambulance, &c., and nurses in residence. Arrangements have also been made for the Isolation of Small-pox cases in a Joint Hospital at Binchester Whins.

GENERAL SANITATION.

Spennymoor Ward.—The sewage is treated at the outfall near Ox-Close Farm. These works are not able to deal with the whole of the sewage.

Ferryhill and Tudhoe Ward.—At present there are no works for dealing with the sewage.

The whole question of the treatment of the sewage of the district has had the earnest consideration of the Council for some time past. The Council have engaged the services of a consulting engineer, Mr Murphy, of Morpeth, to prepare a scheme of sewerage and sewage disposal for the whole of the district, with plans, specifications, &c. Acting on his advice it is proposed to deal with the question in three sections. It is proposed to deal with the first section, comprising Tudhoe Colliery and part of Tudhoe Village as soon as the necessary arrangements can be made. My negotiations for securing suitable land near the Croxdale end of Chair Lane suitable for the outfall works are now in progress and it is hoped that during the coming year the work for this section will be commenced.

The pollution of some of the tributaries of the River Wear by the sewage from this district, has been the cause of several representations from the Officers of the County Council. It is hoped that this pollution is now in a fair way to be remedied.

Elementary Schools.—Flushing closets have been provided for all departments of the Rosa Street Council Schools and Upper Church Street Council Schools during the year 1906. Flushing closets were already provided at the National Schools, Mount Pleasant, the Council Schools, Tudhoe Grange, and at St. Mary's Home, Tudhoe.

The other Schools have ashclosets or privies and ashpits.

An application was made for the sewer to be carried to the Council Schools at Tudhoe Colliery, but as the sewerage of this district is shortly to be dealt with it was deemed advisable to leave it over for the present.

It is to be hoped that the County Council will soon see their way to provide flushing closets for the Elementary Schools in the district as ashclosets and privies are most unsuitable for schools where the ashes are not nearly sufficient to absorb the large amount of liquid and solid excrement.

SANITARY WORK.

The following summary supplied by the Sanitary Inspector shows the work accomplished during the year :

Yards repaired or relaid	110
Midden privies converted into ash closets or water closets	255
Floors in houses relaid	42
Defective drains remedied	62
Schools disinfected on special occasions	2

All the elementary schools were disinfected at the end of the year.

The work of improving the sanitary condition of the district has been steadily going on, but one cannot but regret that in many cases the occupiers of houses do not take more trouble to keep their premises in a more sanitary condition. It is distinctly disappointing to find as one frequently does that after the yards and outbuildings have been put into a sanitary state by the owners that the gullies have been allowed to get blocked and remain so by the tenants. It is very disappointing to find that after the great amount of sanitary work that has been done in the district that the Vital Statistics come out so badly, in 1905 they were the worst in the whole County of Durham, they show however some improvement in 1906. I am convinced that we shall not get much improvement in this respect until the question of Infant Mortality is taken seriously in hand, our large Infant Mortality rate is neutralizing the effect of the sanitary improvements on the death rate.

DISPOSAL OF REFUSE.

Some few years back large open ashpits and midden privies were almost universal in the district, during the last few years the council have taken this matter in hand and a large number of ash closets have been substituted for these, so that now a large majority of houses have ash closets. This I think is a great improvement as it necessitates more frequent scavenging. The ash closets are usually emptied weekly.

The removal of refuse is let out by the Council to Contractors who do the work at night. On the whole it is satisfactorily done but the work requires constant supervision.

HOUSING OF THE WORKING CLASSES.

As in most of the mining districts in the County there is an insufficiency of houses in your district and this necessitates a certain amount of overcrowding. I am pleased to report however that 53 new houses have been built during the year and others are still in progress. The building of a large number of houses at Dean Bank has also tended to reduce the pressure in this district.

Seven cases of overcrowding have been dealt with and 2 convictions obtained. It is unfortunate that the legal steps necessary to abate overcrowding are so slow, often occupying a month or two, and when the people are ejected they often get into another house and have to be dealt with again.

DAIRIES AND COWSHEDS.

All the dairies and cowsheds in the district have been inspected by me or your Sanitary Inspector. Structural defects have in a few cases been pointed out and remedied. The cobble floors however in the Tudhoe district have not yet been replaced. As I remarked in my last report suitable places for storing the milk are conspicuous by their absence. The usual excuse being that the milk is sold directly it is milked.

The whole question of the milk supply of the country in my opinion requires to be seriously dealt with, as it is I believe answerable for a large amount of disease. There is no power to prevent the milk from tuberculous cows being sold for domestic use. In most of the cowsheds I visited the cows were in a very filthy condition and little if any trouble seemed to be taken to keep them in a cleanly state, I would strongly urge on all consumers of milk to see that it is invariably boiled before use, as boiling destroys nearly all the injurious organisms it may contain.

SLAUGHTER HOUSES.

Inspection has been made of all the slaughter-houses in the district, as a rule they are well kept and the byelaws as to frequent removal of refuse are carried out. As I pointed out in my last report however many of them are in too close proximity to dwelling houses and there is no doubt that the provision of a public slaughter house would be a great improvement.

WATER SUPPLY.

Is from the Weardale and Consett Co's. Reservoirs, and is a pure water of excellent quality for domestic purposes, nearly half of Spennymoor Ward is however supplied from a small reservoir just above Stratton Street, this reservoir is uncovered and in too close proximity to streets and dwelling houses, the result being that in windy weather the surface of the water is covered with a scum of dust which settles down and pollutes the water. Acting on the advice of the Local Government Board Inspector, the Council were for some months in correspondence with the Water Company trying to get this state of affairs remedied, when in the end the Water Company refused to do anything in the matter, the Council wrote to the Local Government Board asking them for advice, this the Local Government Board refused to give which was distinctly disappointing.

The Council have since taken samples from the reservoir and from a tap in a dwelling house supplied from the reservoir, and the following is a copy of the analyses by the County Analyst.

Sample A.—(Reservoir.)

Colour and appearance in 2ft. tube	Faint Greenish, not clear
Odour when heated to 100°F	Musty

Grains per gallon.

Chlorine as Chloride	·9506
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Nitrogen as Nitrates	·0173
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Albuminoid Ammonia	·0064
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Ammonia	·0014
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Oxygen Absorption	·0548
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Injurious Metals	none
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Total solid matter dried at 220°F	3·8500
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Microscopical Examination.—Noticeable deposit from half gallon consisting of mineral matter, decomposing vegetable matter, fungus growths, moving organisms, linen fibres, &c.—

Sample B.—(House Tap.)

Colour and appearance in 2ft. tube	Greenish, not clear
Odour when heated to 100°F	Musty

Grains per gallon.

Chlorine as Chloride	1·0185
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Nitrogen as Nitrates	none
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Ammonia	none
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Albuminoid Ammonia	·0014
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Oxygen Absorption	·0372
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Injurious Metals	none
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Total solid matter dried at 220°F	4·200
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Microscopical Examination.—Noticeable deposit from half gallon consisting of mineral matter, decomposing vegetable matter, moving organisms, fungus growths, linen and woollen fibres.

Observations.—For all sanitary purposes the two may be taken as one, the actual chemical composition of these samples is quite satisfactory, but the results of the microscopical examination prove one of two things either the water is not a filtered water, or if has been filtered it has subsequently been contaminated by contact either with unfiltered surface water or atmospheric dust, in any case such contamination is objectionable on the ground that such water or dust is not free from domestic refuse.

(Signed) W. F. Keating Stock.

When a sample was taken before the Water Company objected to it on the ground that it was taken from the reservoir and was not of the same quality as supplied to the houses. This analysis proves that the water as supplied to the consumer is little if any better than that taken from the reservoir.

Copies of these analyses have been sent to the Weardale and Consett Water Company. They have had the matter examined into and have written to say that it is receiving their attention. I have reason to believe that they are likely soon to take steps to have this contamination prevented.

OUTLYING FARMS (Water Supply.)

The Council on account of the cost likely to be incurred found that they were unable to deal with this matter, they therefore applied to the Local Government Board to invest them with the same powers as a Rural District Council. This the Local Government Board refused to do. I must regret this as the supply to some of the farms though not actually dangerous is not satisfactory. As the cost of furnishing a better supply would in nearly all cases be more than the Council have power to enforce they are practically unable to move in the matter.

As most of the farms are dairy farms sending milk into the district, and the water is used to cleanse the dairy vessels, I cannot help regarding this as a possible source of danger to the health of the district.

Since my last report the W. & C. Water Co's water has been laid on at Pickering's Farm, Tudhoe.

Monk's Close Farm and Butcher Race Cottages are still without a proper water supply.

Ox Close Farm.—In my last annual report I pointed out the great danger of contamination of the water supply of this farm from the surface water running down from the gardens above. An analysis has been made which proved that such contamination actually took place. The owners were communicated with and they have promised to have a brick and cement reservoir built, the walls to extend well into the clay below and reach at least a foot above the ground level. This is now being carried out and will I hope remove all danger of contamination from surface water.

SANITARY REQUIREMENTS.

Back Streets.—Many of the back streets are in a bad condition and require making. I am pleased to report that several of the back streets have been attended to during the year, there are however many more requiring attention. Back Bessemer Terrace to which I called attention in my last report is still in a very unsatisfactory condition. Some of the streets have been made with tar macadam and this with a brick channel on both sides gives to my mind a very satisfactory street which is easily kept clean.

Sewage Disposal.—The Council have now taken this work up in earnest and I hope this matter which has been a cause of anxiety for some years is now in a fair way to be put on a satisfactory basis.

Lady Sanitary Inspector.—The Infant Mortality rate remains a great blot upon the district. I am of opinion that in a district of this character it should be somewhere between 100 and 120 instead of its present high figure. In my opinion the Council would find the best way to reduce it would be to engage a lady Sanitary Inspector, as I feel convinced that it is largely due to the ignorance and carelessness of the mothers. Whether the Council do so or not I would urge them to give this question of Infant Mortality their serious and careful attention and try in this or some other way to remove this crying evil.

POPULAR HEALTH TALKS.

By kind permission of the County Council Dr. J. Ross, one of their Inspectors of Midwives, came out in October and gave a series of three short health talks. The lectures were very fairly attended and were I believe interesting and instructive. They were inaugurated with the idea of trying to lessen the Infant Mortality rate. Unfortunately it is very difficult to get the class of women who most need these lectures to attend them. Those who did attend them have in many cases assured me they found them very helpful. I should like to express my indebtedness to Dr. Janet Ross for giving the lectures, to the Vicar of St. Andrew's who kindly lent the hall free of charge and helped in other ways, and to the ladies who supported Dr. Ross at the lectures.

FACTORY AND WORKSHOP ACT.

In company with your Sanitary Inspector, I visited all the larger workshops in the district. Overcrowding was found in one case, and sanitary defects in another, these matters have been dealt with. I was much struck with the foulness of the air in some of the workshops due not to the absence of appliances for ventilation, but to the fact that the workers to keep themselves warm had carefully closed them, I cannot but think that if they indulged in a little less warmth and a little more fresh air, they could not fail to be healthier.

In one of the mineral water factories I found no arrangement for rinsing the bottles after they have been washed. The bottles were tipped into a tub of hot water, brushed and then drained, the water in this tub was in a filthy condition as (when one finds that empty bottles are often thrown on the dust heap) it could scarcely fail to be, I cannot help thinking that this is a serious danger to the public health.

Insanitary Property.—You will probably have noticed the absence of reports on insanitary property both in this and my

monthly reports. A little explanation is needed. It is not that I have not given this matter my attention. Under the old system it was customary for the Medical Officer and the Sanitary Inspector both to report on property, and often the same property was dealt with in both reports, I found this led to a great deal of confusion. I have deemed it better when I come across insanitary property to call the Inspector's attention to it and let him report on it. In no instance has he failed to do so. I think this arrangement tends to efficiency.

It is distinctly disappointing that the large number of sanitary improvements which have been effected in the last few years, have not shown a greater effect on the vital statistics. I would urge the Council not to relax their efforts to bring the whole district into a thorough sanitary condition and to improve the water supply. I would specially request them during the coming year, to give their attention to the question of Infant mortality.

Your obedient servant,

W. Mussellwhite.

(1)

Vital Statistics of Whole District during 1906 and Previous Years.

Name of District—Spennymoor Urban.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				Total Deaths in Public Institu- tions in the District	Deaths of Non- residents registered in Public Institu- ions in the District	Deaths of Reside's registered in Public Institu- ions be- yond the District	Nett Deaths at all Ages belonging to the District.	
		Number	Rate*	Under 1 Year of Age.	Rate per 1,000 Births regist'e'd	Number	Rate*				Number	Rate*
1	2	3	4	5	6	7	8	9	10	11	12	13
1896	16665	620	37.2	118	190	334	20			3	337	20.2
1897	16665	632	37.9	104	164	282	16.9			6	288	17.2
1898	16665	652	39	141	216	341	20.4			4	345	20.7
1899	16665	667	40	149	223	385	23.1			10	395	23.7
1900	16665	664	39.8	110	165	328	19.6			4	332	19.9
1901	16672	654	39.2	153	233	403	24.1			10	413	24.8
1902	16701	656	39.2	106	161	286	17.1			6	292	17.4
1903	16729	609	36.4	80	131	249	14.8			18	267	15.9
1904	16758	653	33.9	111	169	321	19.1			14	335	19.9
1905	16786	621	37	140	223	339	20			16	355	21.1
Averages for years 1896 1905	16697	642	38.3	121	187	326	19.5			9	335	20
1906	16814	635	37.7	99	155	291	17.3			16	307	18.2

* Rates calculated per 1 000 of estimated population Area of District in acres (exclusive of area covered by water 3,388. Total population at all ages 16,661; Number of inhabited houses 3204; Average number of persons per house 5; at Census of 1901: Institutions outside the District receiving sick and infirm persons from the District — Union Workhouse, Bishop Auckland, Union Workhouse, Durham, County Hospital, Durham, Lady Eden Hospital, Bishop Auckland County Lunatic Asylum, Sedgfield. Other Institutions, the deaths in which have been distributed among the several localities in the District— Isolation Hospital, Mertonington Lane. Is the Union Workhouse within the District? No.

**(II) Vital Statistics of separate Localities in 1906 and previous years.
Name of District—Spennymoor Urban.**

Name of Localities	URBAN DISTRICT.				SPENNYMOOR WARD.				FERRYHILL WARD.				TUDHOE WARD			
YEAR.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1896	16665	620	337	118	6973	229	141	45	3019	133	58	22	7864	270	135	37
1897	16665	632	288	104	6973	259	117	58	3019	102	61	28	7864	291	107	55
1898	16665	652	345	141	6973	259	140	58	3019	128	73	28	7864	280	140	70
1899	16665	667	395	149	6973	247	138	51	3019	137	51	20	7900	280	174	43
1900	16665	664	332	110	6685	271	140	47	2705	128	71	35	7840	255	141	50
1901	16672	654	413	153	6052	243	180	68	2769	119	51	17	7858	294	164	43
1902	16701	656	292	106	6066	236	111	46	2777	114	55	16	7871	259	124	32
1903	16729	609	267	80	676	254	100	32	2782	113	64	19	7884	286	112	50
1904	16758	653	335	111	6086	224	138	42	2788	115	69	34	7896	282	133	53
1905	16786	621	355	140	6097	224	155	54	2793	115	69	34	7896	282	134	53
Average of years 1896 to 1905	16697	645	335	121	6546	246	136	49	2878	121	61	22	7868	278	135	48
1906	16814	635	307	99	6106	247	126	43	2800	128	57	18	7908	260	124	38

(III)

**Cases of Infectious Diseases notified during
the year 1906.**

Name of District—Spennymoor Urban.

Notifiable Disease	Cases Notified in Whole District.							Total Cases notified in each Locality.		
	At all Ages	At Ages +—Years.						Spennymoor Ward.	Ferryhill Ward.	Tudhoe Ward.
		Under 1	1 to 5.	5 to 15	15 to 25	25 to 65	65 and upw'd.			
Small-pox ..										
Cholera ..										
Diphtheria ..	21		7	11	3			13	2	6
M'branous Croup ..										
Erysipelas ..	11			2	5	3	1	3	4	4
Scarlet Fever ..	19		7	11	1			14	2	3
Typhus fever ..										
Enteric fever ..	13		2	1	6	4		6	3	4
Relapsing fever ..										
Continued fever ..										
Puerperal fever ..	1				1					1
Plague ..										
Totals ..	45		16	25	16	7	1	36	11	18

No. of Cases removed to Hospital from each Locality:—

Spennymoor Ward—Diphtheria 8 ; Scarlet fever 12 ; Enteric fever 6 ; Total—26.

Ferryhill Ward—Diphtheria 2 ; Scarlet fever 2 ; Enteric fever 3 ; Total—7.

Tudhoe Ward—Diphtheria 3 ; Scarlet fever 3 ; Enteric fever 3 ; Total—9.

Isolation Hospital—Spennymoor Urban District Council's Hospital, Ferryhill Ward.

(IV)

**Causes of, and Ages at, Death during
Year 1906.**

Name of District—Spennymoor Urban.

Causes of Death.	Deaths at the subjoined ages of Residents whether occurring in or beyond the district.							Deaths at all age of residents belonging to Local ities whether occurring in or be- yond the district			Deaths in Pub- lic Institutions.
	All ages	Und 1	1 & und 5	5 & und. 15	15 & und. 25	25 & und 65	65 & up- wds	Spennymoor Ward.	Fhill Ward.	Thoe Ward.	
Small-pox ..											
Measles ..											
Scarlet fever ..											
Whooping-cough ..	7	5	2					3		4	
Diphtheria and mem- branous eroup ..	2		1	1				1		1	
Croup ..	2	1	1						1	1	
Fever { Typhus ..	2				1	1			2		1
Enteric ..											
other continued ..											
Epidemic influenza ..	1					1				1	
Cholera ..											
Plague ..											
Diarrhœa ..	48	32	11			3	2	28	4	16	
Enteritis ..	3		2				1	1		2	
Puerperal fever ..											
Erysipelas ..											
Other septic diseases ..	1		1					1			
Phthisis ..	22		2	1	6	13		8	4	10	
Other tubercular diseases ..	9	1	3	3	1	1		2	3	4	
Cancer, malignant disease ..	10					6	4	4		6	
Bronchitis ..	19	4	4			3	8	7	6	6	
Pneumonia ..	15	3	7	1	1	3		5	5	5	
Pleurisy ..											
Other diseases of Res- piratory organs ..	1					1		1			
Alcoholism ..	3					2	1	2	1		
Cirrhosis of liver ..											
Venereal diseases ..	1	1						1			
Premature birth ..	16	15	1					5	3	8	
Diseases and accidents of parturition ..	3					3			2	1	
Heart diseases ..	12					8	4	4	2	6	
Accidents ..	11	1	1	1	2	6		6		5	
Suicides ..	3				1	2		1	1	1	
Atrophy & Marasmus ..	13	9	4					5	3	5	
Meningitis ..	14	5	4	4	1			4	4	6	
Convulsions ..	14	9	5					8	2	4	
Congenital Defects ..	13	13						3	4	6	
All other causes ..	62		3	1	3	22	33	26	10	26	
All causes	307	99	52	12	16	75	53	126	57	124	1

(V) *Infantile Mortality during the Year 1906.*
Spennymoor Urban District.

*Deaths from stated Causes in Weeks and Months under
One Year of Age.*

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	under One Year. Total Deaths
All Causes.	Certified Uncertified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria : Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Whooping Cough	...	...	...	...	...	...	...	1	3	...	...	...	...	...	...	...	...	5
Diarrhœa, all forms	...	...	...	...	...	...	1	1	4	2	2	1	2	1	2	5	4	25
Enteritis, Muco-enteritis,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gastro-enteritis,	...	...	...	1	...	1	...	...	...	2	...	1	...	...	1	1	...	6
Gastritis, Gastro-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
intestinal Catarrh	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Premature Birth	...	13	...	1	1	15	...	...	...	...	...	...	...	...	...	...	...	15
Congenital Defects	...	3	1	3	...	7	4	2	...	...	...	...	...	...	...	...	...	13
Injury at Birth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Want of Breast-milk,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Starvation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy, Debility,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marasmus	...	...	...	...	...	...	...	...	2	...	1	1	2	2	...	...	1	9
Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Peritonitis :	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Tabes Mesenterica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis	...	...	...	...	...	...	...	...	1	1	...	1	1	...	...	1	...	5
Convulsions	...	4	1	...	...	5	...	...	...	...	...	...	...	1	1	1	1	9
Bronchitis	...	...	...	...	...	...	...	...	1	...	...	...	...	2	...	1	...	4
Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	3
Suffocation, overlying	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Other causes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		20	2	6	1	29	5	7	11	7	4	4	5	6	5	9	7	99

Population estimated to middle of 1906—16814.
Births in the year :—Legitimate 635.
Deaths in the year of legitimate infants :—99.

Summary of Work done in the Inspector of Nuisances' Department during the year 1906, in the Urban District of Spennymoor.

				Number of Informal written Notices by Inspector.	Number of Formal Notices by order of Authority.	Number of Nuisances abated after Notice.
I. PUBLIC HEALTH ACTS.						
Dwelling houses	Foul Conditions	}		23	12	28
and	Structural Defects					
Schools.	Overcrowding		...	7	3	7
Lodging-houses	...		...
Dairies and Milkshops	...		...
†Cowsheds	..		...	4	99	101
Bakehouse	...		...
‡Slaughter-house	...		...		79	79
*Ashpits and Privies	...		...	130	65	120
Deposits of Refuse and Manure	...		...	4		4
Waterclosets	..		...	3		3
Defective Yard Paving	...		...	36	9	36
House	Defective traps	}	... [Sewers			
Drainage	No Disconnections from		...	53	17	62
	Other Faults		...			
Water Supply	...		...
Pigsties	...		...
Animals Improperly Kept	...		...	2		2
Offensive Trades	...		...
Smoke Nuisances	...		...
Other Nuisances	...		...	20	6	22
Totals	...		...	282	290	464

† 95 of these Notices were for Limewashing. ‡ These were for Limewashing.

* 255 Ashpits replaced by Earthclosets or Waterclosets.

II. Housing of the Working Classes Act, 1890.				Number	Remarks.
Formal Notices served	4	Several houses have been made habitable where notices were served in 1905.
Dwellings dealt with	...	...	...	4
Dwellings made habitable after formal notice	...	...	...	4
Closing Orders applied for	...	...	..
Closing Orders granted by Magistrates	...	...	...
Dwellings permanently closed		
III. Factory and Workshop Act, 1901.					
Action taken, Notices served, &c.		These have been inspected.
IV. Water, Food and Drugs.					
Samples of Water taken for Analysis	3	Not satisfactory.
„ „ condemned as unfit for use..	...	...	...
Seizures of Unwholesome Food	...	...	...
Convictions for exposing or selling Unwhole- some Food	...	...	...
Samples of Food and Drugs taken for Analysis	...	...	...
„ „ found Adulterated		
V. Precautions against Infectious Disease.					
Lots of Infectious Bedding stoved or destroyed	10	All Schools have been fumigated during the holidays.
Houses disinfected after Infectious Disease	...	...	...	10
Schools do do do do	...	...	...
Prosecutions for exposure of infected persons or things	...	...	...
Convictions for do do do	...	...	...

4th January, 1907. ARTHUR DOWDELL, Inspector of Nuisances.
To Dr. HILL, The County Medical Officer of Health, Durham.

